WHAT IS CLAIMED:

1. A method for inducing a predetermined amount of bone remodeling and modeling in the cranium of a mammal in need thereof that comprises the steps of:

(a) applying cyclical forces to a cranial region of said mammal in which bone remodeling is desired with a peak magnitude of up to about 10 Newtons and frequencies of up to about 40 Hz in a direction lateral to the sutures for a predetermined period of time; and

(b) repeating said application a plurality of times until a predetermined amount of osteogenesis is obtained.

2. The method according to claim 1 wherein said cyclical forces are repeatedly applied a plurality of times each day.

3. The method according to claim 2 wherein said cyclical forces are repeatedly applied over a period of days.

4. The method according to claim 1 wherein said peak magnitude is about 5 Newtons.

5. A method for inducing a predetermined amount of osteogenesis in the cranium of a mammal in need thereof that comprises the steps of:

(a) applying cyclical forces to a cranial region of said mammal in which osteogenesis is desired with a peak magnitude of about 5 Newtons and

frequencies of about 0.1 to about 8 Hz in a direction lateral to the sutures for a predetermined period of time; and

(b) repeating said application a plurality of times daily until a predetermined amount of osteogenesis is obtained.

6. The method according to claim 5 wherein said cyclical forces are repeatedly applied over a period of months.

7. The method according to claim 5 wherein said cyclical forces are applied to the cranial sutures of said mammal.

8. The method according to claim 5 wherein said cyclic forces are applied at a frequency of about 0.1 to about 2 Hz.

9. A method for realigning one or more of the teeth of a mammal in need thereof that comprises the steps of

(a) applying cyclical forces to at least one tooth of the mammal in which tooth realignment is desired with a peak magnitude of about 5 Newtons and a frequency of about 0.1 to about 2 Hz in a direction of the desired realignment for a predetermined period of time; and

(b) repeating said application a plurality of times until a predetermined amount of tooth realignment is obtained.

10. The method according to claim 9 wherein said cyclical forces are repeatedly applied a plurality of times each day.

11. The method according to claim 10 wherein said cyclical forces are repeatedly applied over a period of days.

12. The method according to claim 9 wherein said peak magnitude is about 2 Newtons.

13. A method for realigning one or more of the teeth of a mammal in need thereof that comprises the steps of

(a) applying cyclical forces to at least one tooth of the mammal in which tooth realignment is desired with a peak magnitude of up to about 10 Newtons and a frequency of about 0.1 to about 40 Hz in a direction of the desired realignment for a predetermined period of time;

(b) repeating said application a plurality of times each day until a predetermined amount of tooth realignment is obtained.

14. The method according to claim 13 wherein said cyclical forces are repeatedly applied over a period of months.

15. The method according to claim 13 wherein said cyclical forces are applied at a frequency of about 0.1 to about 2 Hz.

16. A malocclusion treatment apparatus for realigning teeth, comprising:

a band of generally inelastic material having a first end and a second end;

a hub;

a power source and an actuator within the hub such that when the actuator is powered, realignment cyclical forces can be applied to the band.

17. The malocclusion treatment apparatus of claim 16 wherein the band is attached to at least one tooth.

18. The malocclusion treatment apparatus of claim 16 wherein the band is attached to a plurality of teeth.

19. The malocclusion treatment apparatus of claim 18 wherein the hub is centralized in relation to the teeth.

20. The malocclusion treatment apparatus of claim 16 including a microprocessor for controlling the actuator and the application of force on the band.

21. The malocclusion treatment apparatus of claim 16 wherein the cyclical forces have a peak magnitude of about 10 Newtons and a frequency of about 0.1 Hz to about 40 Hz.

22. The malocclusion treatment apparatus of claim 16 including a pair of drive shafts in mechanical communication with the actuator and in mechanical communication with the band.

23. A malocclusion treatment apparatus for realigning teeth, comprising:

a band of generally inelastic material having a first end and a second end, the band being attached to a plurality of teeth;

a generally centralized hub;

a power source, a microprocessor and an actuator within the hub;

at least one drive shaft in mechanical communication with the actuator and in mechanical communication with the band such that when the actuator is powered cyclical realignment forces controlled by the microprocessor can be applied to the band.

24. The malocclusion treatment apparatus of claim 23 wherein the cyclical forces have a peak magnitude of about 5 Newtons and a frequency of about 0.1 Hz to about 5 Hz.

25. A method of treating malocclusion to realign teeth comprising the steps of:

providing a band of generally inelastic material affixed to one or more teeth;

joining the ends of the band at a generally centralized hub;

providing a power source and an actuator assembly;

applying cyclical mechanical forces with the actuator, in a direction of realignment desired, at the centralized hub and thereby to the band, for a predetermined period of time a plurality of times each day.

26. The method of treating malocclusion to realign teeth of claim 25 including the step of providing a microprocessor to control the actuator and power source.

27. The method of treating malocclusion to realign teeth of claim 26 including the step of providing a program within said microprocessor to cause said actuator to apply cyclical forces with a peak magnitude of about 2 Newtons and a frequency of between about 0.1 Hz and 2 Hz in a direction of the desired realignment for a predetermined period of time.

28. The method of treating malocclusion to realign teeth of claim 27 wherein said cyclical forces are repeatedly applied over a period of months.

29. The method according to claim 27 wherein said cyclical forces are applied at a frequency of about 0.2 to about 1.5 Hz.